B-105: Biochemical changes and quality evaluation in pineapple (*Ananas comosus*.L cv *Mauritius*) stored at different temperatures

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Pineapples (*Ananas comosus*.L cv *Mauritius*) were stored at 8, 10, 14, 20, and at 27-29°C (room temperature). Weight loss, shell & flesh colour, pH, total soluble solids (Brix), total titratable acidity, flesh translucency, ascorbic acid, internal browning intensity, non enzymatic browning and taste were evaluated at seven day intervals for 28 days.

Fruits stored at 8, 10°C recorded the best ratings for taste and fruit quality. However after 14 days of storage the internal browning was observed and intensity increased. At 14°C fruit quality was maintained throughout the storage and was free of internal browning up to 21 days. At 20°C moderate levels of decay developed after two weeks and with time there were changes in the shell, flesh colour and observed slight fermentation with an odour and change in taste. Accelerated ripening and increased colour development of shell & flesh and flesh translucency occurred at room temperature after seven days of storage. Decay set in and fruit quality was severely affected after two weeks of storage at this temperature. The fruit affected by internal browning had significantly lower ascorbic acid and total soluble solids than unaffected fruit. The relationship between the internal browning intensity (X) and the ascorbic acid content (Y_1) and total soluble solids (Y_2) could be expressed respectively by the equations, $\log Y_1=0.7842 - 0.0052X$ and $Y_2=12.6401 - 0.4451X$.